

Claims:

1. (original) A coated product comprising:

a three-dimensional substrate; and

a one hundred percent solids coating applied to said three-dimensional substrate, wherein said coating is applied uniformly on said three-dimensional substrate to form a thin film layer of coating that is 0.001 inches or less thick.

2. (original) The coated product of claim 1, wherein said substrate is wood.

3. (original) The coated product of claim 1, wherein said substrate is a wooden cabinet component.

4. (original) A coated three-dimensional product formed by a process comprising:

supplying a coating material comprised of one hundred percent solids material to a dispensing mechanism; and

applying said coating material from said coating mechanism to the three-dimensional substrate to provide a uniform thin film coating of said coating material on said three-dimensional substrate.

5. (original) The product of claim 4, wherein said uniform thin film coating has a film thickness 0.0015 inches or less.

6. (original) The product of claim 4, wherein said uniform thin film coating has a film thickness 0.001 inches or less.

7. (original) The product of claim 4, wherein said coating material is UV curable.

8. (original) The product of claim 4, wherein said substrate is comprised of wood.

9. (original) The product of claim 4, wherein said substrate is a cabinet component.

10. (original) The product of claim 4, wherein said process further comprises the step of atomizing said coating material to form an atomization stream.

11. (original) The product of claim 10, wherein said atomization stream is temperature controlled.

12. (original)The product of claim 11, wherein said atomization stream is controlled to be between about 80 degrees Fahrenheit and about 160 degrees Fahrenheit.
13. (original)The product of claim 11, wherein said atomization stream is controlled to be between about 110 degrees Fahrenheit and about 140 degrees Fahrenheit.
14. (original)The product of claim 4, wherein the coating material is comprised of particles having an primary particle size in the range of about 25 microns to 50 microns.
15. (original)The product of claim 4, wherein said coating material comprises a sealer and a topcoat.
16. (original)The product of claim 4, wherein said process further comprising the step of sanding or scuffing said substrate.
17. (original)The product of claim 4, wherein the coating material is applied to said substrate by a high precision spray gun.
18. (original)The product of claim 4, wherein said high precision spray gun is a SATA LPTTM jet K3TM HVLP Automatic High Performance Spray Gun or a Can-Am #2100 RC Fluid Recirculation Automatic Spray Gun.
19. (original)The product of claim 4, wherein said process further comprises the step of adding heat to said coating material.
20. (original)The product of claim 19, wherein said coating material is heated to between about 80 degrees Fahrenheit and about 160 degrees Fahrenheit.
21. (original)The product of claim 22, wherein said coating material is heated to between about 110 degrees Fahrenheit and about 140 degrees Fahrenheit.
22. (original)The product of claim 4, wherein said process further comprises the step of providing a pressurized air stream.
23. (original)The product of claim 4, wherein said process further comprises the step of heating said pressurized air stream.
24. (original)The product of claim 23, wherein said pressurized air stream is heated to between about 80 degrees Fahrenheit and about 160 degrees Fahrenheit.
25. (original)The product of claim 23, wherein said heat is supplied from an external source.

26. (original)The product of claim 23, wherein the coating material is applied to said substrate by a high precision spray gun and said heat source is a component of said high precision spray gun.

27. (original)The product of claim 4, wherein said process further comprises heating said substrate to between about 80 degrees Fahrenheit and about 160 degrees Fahrenheit prior to application of said coating.

28. (original)A coated product comprising:

a three-dimensional substrate; and

a uniform thin film coating applied to said substrate, wherein said thin coating film comprises a multi-layer composite coating comprised of one hundred percent solids material, and wherein each of the topcoat and the sealer are applied uniformly on said three-dimensional substrate to form said thin film that is approximately 0.001 inches or less thick.

29. (original)The coated product of claim 31 wherein said three-dimensional substrate is a wooden cabinet component.